

Fire Fighter I

Certification Training Standards Guide [Month Year]



California Department of Forestry and Fire Protection
Office of the State Fire Marshal
State Fire Training

Fire Fighter I

Certification Training Standards Guide [Month Year]

This CTS guide utilizes NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013, NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012, and NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents to provide the qualifications for State Fire Training's Fire Fighter II certification.

State Fire Training coordinated the development of this CTS guide. Before its publication, the Statewide Training and Education Advisory Committee (STEAC) and the State Board of Fire Services (SBFS) recommended this CTS guide for adoption by the Office of the State Fire Marshal (OSFM).



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State Fire Training

Mission

To enable the California Fire Service to safely protect life and property through education, training, and certification.

The California Fire Services Training and Education System

The California Fire Service Training and Education System (CFSTES) were established to provide a single statewide focus for fire service training in California. CFSTES is a composite of all the elements that contribute to the development, delivery, and administration of training for the California fire service. The authority for the central coordination of this effort is vested in the Training Division of the California State Fire Marshal's Office with oversight provided by the State Board of Fire Services.

CFSTES facilitates, coordinates, and assists in the development and implementation of standards and certification for the California fire service. CFSTES:

1. Administers the California Fire Academy System
2. Provides accredited courses leading to certification and approved standardized training programs for local and regional delivery
3. Administers the national accreditation process in California
4. Publishes certification training standards, course plans, and a capstone task book for each certified level in the California fire service

CFSTES is a fire service system developed by the fire service, for the fire service. It is only as successful and effective as the people involved in it.

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State Fire Training appreciates the hard work and accomplishments of those who built the solid foundation on which this program continues to grow.

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How to Read a CTS Guide

State Fire Training develops a Certification Training Standards (CTS) Guide for a variety of job functions in the fire service such as fire fighter, driver/operator, fire instructor, and company officer. The CTS guide lists the requisite knowledge and skills and the job performance requirements a person is expected to complete in order to become certified in a specific function. CTS guides are appropriate for fire service personnel and individuals in related occupations pursuing State Fire Training certification.

Each CTS guide serves as a foundation for the certification programs recommended for adoption by the Office of the State Fire Marshal. Any certification program must be based on job-related knowledge and measurable performance standards. To master the knowledge and skills needed for specialized operations, individuals will require additional training to augment the performance standards included in the CTS guide.

Within the CTS guide, it is impossible to capture the different policies and procedures of each organization in the California fire service. Individuals aspiring to meet State Fire Training's certification training standards must do so in accordance with the codes, standards, regulations, policies, and standard operating procedures applicable within their own departments or jurisdictions.

Format

Each certification training standard included in the CTS guide includes the following:

Section Heading

The section heading describes a general category for a group of training standards. For example, the Fire Marshal CTS includes the following sections: Administration, Risk Management, Community Relations, Professional Development, Regulatory Programs, Fire and Life Safety, and Investigation. Each section contains one or more individual training standards.

Training Standard Title

The training standard title provides a general description of the performance requirement contained within the standard.

Authority

The CTS guide references each standard with one or more paragraphs of the corresponding National Fire Protection Association (NFPA) Professional Qualifications. This ensures that each fire service function within California's certification system meets or exceeds NFPA standards.

When California requirements exceed the NFPA standard, the CTS guide cites the Office of the State Fire Marshal as the authority and prints the corresponding information in *italics*.

Given

This section lists the objects, equipment, materials, or facilities an individual needs in order to acquire the requisite knowledge and skills or to accomplish the job performance requirement(s) within a training standard.

Requisite Knowledge and Skills

This section lists the knowledge and skills that an individual must acquire in order to accomplish the job performance requirement(s) within a training standard.

This section does not include NFPA requisite knowledge or skills that are too general to teach or that individuals should develop through life experiences. For example, a training standard would not list “communicate orally and in writing” or “ability to relate interpersonally” unless they specifically apply to a job performance requirement about acquiring communication skills or developing interpersonal relationships.

Job Performance Requirements

This section includes one or more written statements that describe a specific job-related task and define measurable or observable outcomes. After an individual completes all coursework and requisite requirements, the capstone task book process verifies completion of job performance requirements.

Content

In addition to the individual certification training standards, the CTS guide also includes State Fire Training Revisions and Errata pages.

State Fire Training Content

Located at the back of the CTS guide, this table documents any significant revisions made by State Fire Training to the NFPA standards in the development of this CTS guide. This table is used to justify content additions and advise the course plan development team.

Errata

Located at the back of the CTS guide, this page documents any changes made to the CTS guide outside of the five-year NFPA revision cycle.

Fire Fighter I

Section 1: General

1-1: General Knowledge Requirements

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.1.1
2. Office of the State Fire Marshal

Given

1. None identified

Requisite Knowledge and Skills

1. *Describe* the organization of the fire department
2. *Define* the role of Fire Fighter I in the organization
3. *Describe* the mission of the fire service
4. *Describe* fire department standard operating procedures and rules and regulations as they apply to the Fire Fighter I
5. *Discuss* the value of fire and life safety initiatives in support of the fire department mission to reduce fire fighter line of duty injuries and fatalities
6. *Identify* the role of other agencies as they relate to the fire department
7. *Identify* aspects of the department's member assistance program
8. *Discuss* the importance of physical fitness and a healthy lifestyle to the performance and duties of a fire fighter
9. *Define* the critical aspects of NFPA 1500, Standard on Fire Department Occupational Safety and Health Program
10. *Locate information in departmental documents and standard or code materials*

Job Performance Requirements

There are no job performance requirements identified for this training standard.

Section 2: Fire Department Communications

2-1: Initiating Response to an Emergency

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.2.1
2. Office of the State Fire Marshal

Given

1. The report of an emergency
2. Fire department standard operating procedures
3. Communications equipment

Requisite Knowledge and Skills

1. *Explain* the procedures for reporting an emergency
2. *Identify* department standard operating procedures for taking and receiving alarms
3. *Identify* radio codes, procedures, and clear text for communications
4. *List* information needs of dispatch center
5. *Identify the different types of fire department communications equipment*
6. Operate fire department communications equipment
7. Relay information
8. Record information

Job Performance Requirements

1. Initiate the response to a reported emergency, obtain all necessary information, correctly operate all communications equipment, and promptly and accurately relay information to the dispatch center.

2-2: Operating a Phone in a Non-emergency Situation

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.2.2

Given

1. A fire department phone

Requisite Knowledge and Skills

1. *Describe* fire department procedures for answering non-emergency phone calls
2. Operate fire station telephone and intercom equipment

Job Performance Requirements

1. Receive a telephone call using correct procedures for answering the phone and relaying information.

2-3: Operating Fire Department Radios

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.2.3
2. Office of the State Fire Marshal

Given

1. A fire department radio
2. Fire department *standard* operating procedures

Requisite Knowledge and Skills

1. *Describe fire department* procedures and etiquette for routine *radio* traffic
2. *Describe fire department* procedures and etiquette for emergency *radio* traffic
3. *Describe fire department procedures and etiquette* for emergency *radio* evacuation signals
4. *Identify basic types and operations of fire department radios*
5. *Identify the difference* between routine and emergency *radio* traffic
6. *Operate fire department* radio equipment

Job Performance Requirements

1. Transmit and receive messages via the fire department radio and relay accurate, clear information within the time established by the AHJ.

2-4: Activating an Emergency Call for Assistance

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.2.4
2. Office of the State Fire Marshal

Given

1. Vision-obscured conditions
2. Personal protective equipment
3. Fire department standard operating procedures

Requisite Knowledge and Skills

1. *Identify different* personnel accountability systems
2. *Identify* emergency communication procedures
3. Initiate an emergency call in accordance with the AHJ's procedures
4. Use other methods of emergency calls for assistance

Job Performance Requirements

1. Activate an emergency call for assistance to locate and rescue the fire fighter.

A.5.2.4 An emergency call for assistance can be initiated by the use of a radio, pass device, or other means to alert others to a fire fighter's need of emergency assistance. This should also include the term mayday, fire fighter down, or such other terminology as determined by the AHJ.

Section 3: Fireground Operations

3-1: Using Structural Personal Protective Ensemble

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.1.2
2. Office of the State Fire Marshal

Given

1. *Structural personal protective ensemble*

Requisite Knowledge and Skills

1. *Identify the components of structural personal protective ensemble*
2. *Describe the protection provided by structural personal protective ensemble*
3. *Explain the importance of standards for structural personal protective ensemble*
4. *Describe the limitations of structural personal protective ensemble*
5. *Identify the proper method for inspecting, cleaning, and maintaining structural personal protective ensemble*
6. *Don structural personal protective ensemble*
7. *Doff structural personal protective ensemble*
8. *Prepare structural personal protective ensemble for reuse*

Job Performance Requirements

1. Don structural personal protective ensemble so that all elements of the ensemble are worn according to manufacturer guidelines, within 60 seconds.

3-2: Operating a Self-Contained Breathing Apparatus

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.1

Given

1. Self-contained breathing apparatus
2. Other personal protective equipment

Requisite Knowledge and Skills

1. *Identify* conditions requiring respiratory protection
2. *Describe* the uses and limitations of a self-contained breathing apparatus
3. *Identify* the components of a self-contained breathing apparatus
4. *Describe different* donning procedures
5. *Describe different* breathing techniques
6. *Describe* indications for and emergency procedures used with a self-contained breathing apparatus
7. *Describe operational inspection for a self-contained breathing apparatus*
8. *Identify* physical requirements of the self-contained breathing apparatus wearer
9. *Demonstrate different controlled breathing techniques*
10. Replace self-contained breathing apparatus air cylinders
11. Use a self-contained breathing apparatus to exit through restricted passages
12. Initiate and complete emergency procedures in the event of self-contained breathing apparatus failure or air depletion
13. *Perform operational inspection for self-contained breathing apparatus*
14. Complete donning procedures

Job Performance Requirements

1. Use a self-contained breathing apparatus during emergency operations, correctly don and activate a self-contained breathing apparatus within 60 seconds, use controlled breathing techniques, activate emergency techniques and procedures if the self-contained breathing apparatus fails, recognize low-air warnings, avoid intentionally compromising respiratory protection, and exit hazardous areas prior to air depletion.

A.5.3.1 The Fire Fighter I should already be wearing full protective clothing prior to the beginning of this SCBA-donning procedure. In addition to fully donning and activating the SCBA, the Fire Fighter I should also replace any personal protective clothing (i.e., gloves, protective hood, helmet, etc.) displaced during the donning procedure and activate the personal alert safety system (PASS) device.

3-3: Responding on an Apparatus

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.2

Given

1. Personal protective clothing
2. Other necessary personal protective equipment
3. *An apparatus*

Requisite Knowledge and Skills

1. *Describe* mounting and dismounting procedures for riding a fire apparatus
2. *Identify* hazards and ways to avoid hazards associated with riding an apparatus
3. *Describe* prohibited practices
4. *Identify different* types of department personal protective equipment and *their uses*
5. Use each piece of provided safety equipment

Job Performance Requirements

1. Respond on an apparatus to an emergency scene, correctly mount and dismount the apparatus, use seat belts while the vehicle is in motion, and correctly use other personal protective equipment.

A.5.3.2 Other personal protective equipment might include hearing protection in cabs that have a noise level in excess of 90 dBa, eye protection for fire fighters riding in jump seats that are not fully enclosed, and SCBAs for those departments that require fire fighters to don SCBAs while en route to the emergency.

3-4: Operating at an Emergency Scene

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.3

Given

1. *Personal* protective equipment
2. Traffic and scene control devices
3. Structure fire and roadway emergency scenes
4. Traffic hazards
5. Downed electrical wires
6. An assignment
7. Standard operating procedures
8. *An apparatus*

Requisite Knowledge and Skills

1. *Identify* potential hazards involved in operating on emergency scenes including vehicle traffic, utilities, and environmental conditions
2. *Describe* proper procedures for *mounting and* dismounting an apparatus in traffic
3. *Describe* procedures for safe operation at emergency scenes
4. *Identify* the protective equipment available for members' safety on emergency scenes and work zone designations
5. Use personal protective clothing
6. Deploy traffic and scene control devices
7. Dismount an apparatus
8. Operate in the protected work areas as directed

Job Performance Requirements

1. Establish and operate in work areas at emergency scenes, follow procedures, wear protective equipment, establish protected work areas as directed using traffic and scene control devices, and perform assigned tasks only in established protected work areas.

A.5.3.3 The safety of responders operating at an emergency scene is a key concern and one of the primary skills that the fire fighter must develop. Operations on roads and highways, on scenes where visibility is restricted, or where utilities can be unstable present a significant risk to the fire fighter as they dismount from apparatus and initiate emergency operations. Special protective equipment and constant attention to potential hazards is essential.

Fire fighters can be assigned to direct the movement of traffic at the scene or set up flare or cone lines either independently or in conjunction with law/traffic enforcement officers. A fire

fighter assigned to this duty (either briefly or until the incident is under control) should understand the proper techniques to control traffic and the appropriate use of protective clothing and signaling equipment.

Federal law requires that fire department SOPs when operating on the roadway be in compliance with the U.S. Department of Transportation publication *Manual on Uniform Traffic Control Devices*

Draft

3-5: Forcing Entry into a Structure

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.4

Given

1. Personal protective equipment
2. Tools
3. An assignment
4. *Doors, windows, and walls*

Requisite Knowledge and Skills

1. *Describe* basic construction of typical doors, windows, and walls within the department's community or service area
2. *Describe types and uses of hand and power tools*
3. *Describe the* operation of doors, windows, and locks
4. *Identify* the dangers associated with forcing entry through doors, windows, and walls
5. Transport and operate hand and power tools
6. Force entry through doors, windows, and walls using assorted methods and tools

Job Performance Requirements

1. Remove barriers and produce an opening that is safe and ready for use by forcing entry into a structure using tools as designed.

A.5.3.4 The Fire Fighter I should be able to force entry through wood, glass, and metal doors that open in and out, overhead doors, and windows common to the community or service area.

3-6: Operating in a Hazardous Area

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.3.5
2. Office of the State Fire Marshal

Given

1. Vision-obscured conditions
2. *Personal protective equipment*

Requisite Knowledge and Skills

1. *Describe* emergency evacuation methods *for fire fighter survival*
2. *Define* what constitutes a safe haven
3. *Identify* elements that create or indicate a hazard
4. *Demonstrate emergency evacuation methods for fire fighter survival*
5. Operate as a team member in vision-obscured conditions
6. Locate and follow a guide line
7. Evaluate areas for hazards
8. Identify a safe haven

Job Performance Requirements

1. As a team, exit a hazardous area without endangering others, maintain team integrity, and find a safe haven before the air supply is exhausted.

<p>A.5.3.5 When training exercises are intended to simulate emergency conditions, smoke-generating devices that do not create a hazard are required. Several accidents have occurred when smoke bombs or other smoke-generating devices that produce a toxic atmosphere have been used for training exercises. All exercises should be conducted in accordance with the requirements of NFPA 1404, <i>Standard for Fire Service Respiratory Protection Training</i>.</p>
--

3-7: Working with Ground Ladders

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.3.6
2. Office of the State Fire Marshal

Given

1. Single and extension ladders
2. An assignment
3. Team members, if needed
4. *Personal protective equipment*

Requisite Knowledge and Skills

1. *Identify the uses of ground ladders*
2. *Identify the types, parts and construction features of ground ladders*
3. *Identify types of lifts and carries*
4. *Describe methods used to secure ground ladders*
5. *Describe proper climbing techniques*
6. *Describe methods to safely work off ground ladders*
7. *Describe the hazards associated with setting up ladders*
8. *Define what constitutes a stable foundation for ladder placement*
9. *Identify different angles for various tasks*
10. *Describe safety limits to the degree of angulation*
11. *Describe what constitutes a reliable structural component for top placement*
12. Lift and carry ladders
13. *Tie off a halyard*
14. Raise and move ladders
15. Extend and lock flies
16. *Secure ground ladders*
17. Determine that a wall and roof will support the ladder
18. Judge extension ladder height requirements
19. Place the ladder to avoid obvious hazards
20. *Demonstrate proper methods to safely work off ground ladders*
21. *Demonstrate proper climbing techniques*

Job Performance Requirements

1. Set up ground ladders, assess hazards, ensure ground ladders are stable and their angles are correct for climbing, extend extension ladders to the necessary height and lock their flies, place the tops of the ladders against reliable structural components, and accomplish the assignment.

A.5.3.6 The fire fighter should be able to accomplish this task with each type and length of ground ladder carried by the department.

Draft

3-8: Extinguishing Passenger Vehicle Fires

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.3.7
2. Office of the State Fire Marshal

Given

1. Personal protective equipment
2. Attack line (*1½-inch or larger*)
3. Hand tools
4. *Passenger vehicle*

Requisite Knowledge and Skills

1. *Describe* principles of fire streams as they relate to fighting *passenger vehicle* fires
2. *Identify* precautions to be followed when advancing hose lines toward a *passenger vehicle*
3. *List* observable results that a fire stream has been properly applied
4. Identify the hazards associated with alternative fuels in passenger vehicle fires
5. *Describe* dangerous conditions created during a *passenger vehicle* fire
6. *Describe* common types of accidents or injuries related to fighting *passenger vehicle* fires and how to avoid them
7. *Describe* how to access locked passenger, trunk, and engine compartments
8. *Identify* methods for overhauling a *passenger vehicle*
9. Identify *passenger vehicle* fuel types
10. Assess and control fuel leaks
11. Open, close, and adjust the flow and pattern on nozzles
12. Apply water for maximum effectiveness while maintaining flash fire protection
13. Advance 1½-inch or larger diameter attack lines
14. Expose hidden fires by opening all *passenger vehicle* compartments

Job Performance Requirements

1. Operating as a member of a team, attack a passenger vehicle fire, avoid hazards, identify and control leaking flammable liquids, maintain protection from flash fires, overhaul all vehicle compartments, and extinguish the fire.

A.5.3.7 Passenger vehicles include automobiles, light trucks, and vans.

3-9: Extinguishing Exterior Fires

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.3.8
2. Office of the State Fire Marshal

Given

1. Fires in stacked or piled and small unattached structures or storage containers that can be fought from the exterior
2. Attack lines
3. Hand tools
4. Master stream devices
5. An assignment
6. *Personal protective equipment*

Requisite Knowledge and Skills

1. *Describe* the types of attack lines and water streams appropriate for attacking stacked, piled materials, and outdoor fires
2. *Identify* dangers, such as collapse, associated with stacked and piled materials
3. *Describe* various extinguishing agents and their effect on different material configurations
4. *Identify* tools and methods to use in breaking up various types of materials
5. *Describe* the difficulties related to complete extinguishment of stacked and piled materials
6. *Identify* water application methods for exposure protection and fire extinguishment
7. *Describe* dangers such as exposure to toxic or hazardous materials associated with storage building and container fires
8. *Identify* obvious signs of origin and cause
9. *List* techniques for the preservation of fire cause evidence
10. Recognize inherent hazards related to the material's configuration
11. Operate handlines or master streams
12. Break up material using hand tools and water streams
13. Evaluate and modify water application for maximum penetration
14. Search for and expose hidden fires
15. Assess patterns for origin determination
16. Evaluate for complete extinguishment

Job Performance Requirements

1. Extinguish fires in exterior Class A materials, protect exposures, stop the spread of fire, avoid collapse hazards, effectively apply water, extinguish the fire, and preserve signs of the origin area(s) and arson.

A.5.3.8 The Fire Fighter I should be able to extinguish fires in stacked or piled materials such as hay bales, pallets, lumber, piles of mulch, sawdust, other bulk Class A materials, or small unattached structures that are attacked from the exterior. The tactics for extinguishing each of these types of fires are similar enough to be included in one JPR.

Live fire evolutions should be conducted in accordance with the requirements of NFPA 1403, Standard on Live Fire Training Evolutions. It is further recommended that prior to involvement in live fire evolutions, the fire fighter demonstrate the use of SCBA in smoke and elevated temperature conditions.

In areas where environmental or other concerns restrict the use of Class A fuels for training evolutions, properly installed and monitored gas-fueled fire simulators might be substituted.

3-10: Conducting Search and Rescue Operations

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.9

Given

1. An assignment
2. Vision-obscured conditions
3. Personal protective equipment
4. A flashlight
5. Forcible entry tools
6. Hose lines *or* guide lines
7. Ladders, when necessary
8. *Thermal imaging camera*

Requisite Knowledge and Skills

1. *Describe the use of forcible entry tools during rescue operations*
2. *Describe the use of thermal imaging cameras and other search tools*
3. *Describe the use of ground ladders for rescue operations*
4. *Identify psychological effects of operating in obscured conditions and ways to manage them*
5. *Describe methods to determine if an area is tenable*
6. *Define primary and secondary search techniques*
7. *Identify team members' roles and goals in search and rescue operations within a structure*
8. *Define methods to use and indicators of finding victims*
9. *Describe victim removal methods (including various carries)*
10. Set up and use different types of ladders for various types of rescue operations
11. Rescue a fire fighter whose respiratory protection is not functioning
12. Rescue a person who has no respiratory protection
13. Assess areas to determine tenability

Job Performance Requirements

1. Operating as a member of a team, conduct search and rescue in a structure, maintain team integrity, correctly place ladders when used, search all assigned areas, locate and remove all victims, and avoid compromising team members' safety, including respiratory protection.

A.5.3.9 Fire departments and training organizations must use reason and good judgment when training fire fighters to perform fire fighter rescue (rapid intervention) and self-survival evolutions. Training programs should put more emphasis on avoiding being trapped or disoriented in severe fire conditions than they should on getting out of them. While learning practical fire fighter rescue and self-survival skills is important, the particular skills that are

taught should not require fire fighters to use tools beyond the limits of their intended use, should not place the fire fighters in an inordinate amount of danger during the training evolutions, and should be techniques that could realistically be required on the fireground. Fire departments and training organizations should balance the risk of injury or death to the fire fighter during training on these evolutions with the actual chance that they would ever need to apply them in real life. There are numerous accounts of fire fighters being injured or killed during rapid intervention and self-survival training of skills that will never, or should never, be performed on the fireground. One example of these questionable techniques is sliding down ground ladders. In the rare event that more than one fire fighter will need to exit the same window in an expedient manner, once the first fire fighter steps down two or three rungs, they are not obstructing the next fire fighter from exiting the window. Yet, numerous fire fighters have been seriously injured or died attempting to perform this task in training.

A.5.3.9 (B) It is not the intent of the Technical Committee on Fire Fighter Professional Qualifications to prohibit a fire fighter from partially or completely removing the backpack assembly, as an emergency procedure only, to exit through a restricted passage, without removing the face piece or compromising the air supply in any manner.

3-11: Conducting Structural Fire Fighting Operations

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.3.10
2. Office of the State Fire Marshal

Given

1. An attack line (*1½-inch or larger*)
2. Ladders, when needed
3. Personal protective equipment
4. Tools
5. An assignment

Requisite Knowledge and Skills

1. *Identify types, designs, and uses of fire hoses*
2. *Identify fittings, tools, and appliances*
3. *Describe common building materials and construction types*
4. *Identify the principles of fire streams*
5. *Describe types, design, operation, nozzle pressure effects, and flow capabilities of nozzles*
6. *Identify precautions to be followed when advancing hose lines to a fire*
7. *Describe observable results that a fire stream has been properly applied*
8. *Identify dangerous building conditions created by fire*
9. *Identify principles of exposure protection*
10. *Describe potential long-term consequences of exposure to products of combustion*
11. *List physical states of matter in which fuels are found*
12. *List common types of accidents or injuries and their causes*
13. *Describe the application of each size and type of attack line*
14. *Define the role of the backup team in fire attack situations*
15. *Describe attack and control techniques for below, at, and above grade level fires*
16. *Identify methods for locating and exposing hidden fires*
17. Prevent water hammer when shutting down nozzles
18. Open, close, and adjust nozzle flow and patterns
19. Apply water using direct, indirect, and combination attacks
20. Advance charged and uncharged *hand* lines (*1½-inch diameter or larger*) up ladders and up and down interior and exterior stairways
21. Extend hose lines
22. Replace burst hose sections
23. Operate charged *hand* lines of 1½-inch diameter or larger while secured to a ground ladder
24. Couple and uncouple various handline connections
25. Carry hose

- 26. Attack fires at grade level and above and below grade levels
- 27. Locate and suppress interior wall and subfloor fires

Job Performance Requirements

1. Operating as a member of a team, attack an interior structure fire, maintain team integrity, deploy the attack line for advancement, correctly place ladders when used, gain access into the fire area, effectively apply water, correctly approach the fire using attack techniques that facilitate suppression given the level of the fire, locate and control hidden fires, maintain the correct body posture, recognize and manage hazards, and bring the fire under control.

A.5.3.10 The Fire Fighter I should be proficient in the various attack approaches for room and contents fires at three different levels (at grade, above grade, and below grade).

Maintenance of body posture in the standard refers to staying low during initial attack, protecting oneself from falling objects, and otherwise using common sense given the state of the fire's growth or suppression. Live fire evolutions should be conducted in accordance with the requirements of NFPA 1403, Standard on Live Fire Training Evolutions. It is further recommended that prior to involvement in live fire evolutions, the fire fighter demonstrate the use of SCBA in smoke and elevated temperature conditions. In areas where environmental or other concerns restrict the use of Class A fuels for training evolutions, properly installed and monitored gas-fueled fire simulators might be substituted.

3-12: Performing Horizontal Ventilation Operations

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.11

Given

1. An assignment
2. Personal protective equipment
3. Ventilation tools
4. Equipment
5. Ladders

Requisite Knowledge and Skills

1. *Describe* the principles, advantages, limitations, and effects of horizontal, mechanical, and hydraulic ventilation
2. *Describe* safety considerations when venting a structure
3. *Describe* fire behavior in a structure
4. *List* the products of combustion found in a structure fire
5. *Identify* the signs, causes, effects, and prevention of backdrafts
6. *Describe* the relationship of oxygen concentration to life safety and fire growth
7. Transport and operate ventilation tools and equipment and ladders
8. Break windows and door glass and remove obstructions

Job Performance Requirements

1. As a part of a team, perform horizontal ventilation on a structure, free ventilation openings of obstructions, use tools as designed, place ladders and ventilation devices correctly, and clear structure of smoke.

3-13: Performing Vertical Ventilation Operations

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2012
 - Paragraph 5.3.12
2. Office of the State Fire Marshal

Given

1. An assignment
2. Personal protective equipment
3. Ground and roof ladders
4. *Ventilation* tools

Requisite Knowledge and Skills

1. *Describe* the methods of heat transfer
2. *Describe* the principles of thermal layering within a structure on fire
3. *List* the techniques and safety precautions for venting flat roofs, pitched roofs, and basements
4. *Describe* basic indicators of potential collapse or roof failure
5. *Identify* the effects of construction type and elapsed time under fire conditions on structural integrity
6. *Describe* the advantages and disadvantages of vertical and trench/strip ventilation
7. Transport and operate ventilation tools and equipment
8. Hoist ventilation tools to a roof
9. Cut roofing and flooring materials to vent flat roofs, pitched roofs, and basements *and retreat from the area as a team when ventilation is accomplished*
10. Sound a roof for integrity
11. Clear an opening with hand tools
12. Deploy roof ladders on pitched roofs while secured to a ground ladder *for vertical ventilation*

Job Performance Requirements

1. As part of a team, perform vertical ventilation on a structure, position ladders for ventilation, create a specified opening, remove all ventilation barriers, avoid compromising structural integrity, release products of combustion from the structure, and retreat from the area as a team when ventilation is accomplished.

3-14: Performing Overhaul

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.3.13
2. Office of the State Fire Marshal

Given

1. Personal protective equipment
2. Attack line
3. Hand tools
4. A flashlight
5. An assignment

Requisite Knowledge and Skills

1. *Describe* types of fire attack lines and water application devices most effective for overhaul
2. *Discuss* water application methods for extinguishment that limit water damage
3. *Identify* types of tools and methods used to expose hidden fire
4. *Discuss* dangers associated with overhaul
5. *Describe* obvious signs of area of origin or arson
6. *Identify* reasons for protection of fire scene
7. Deploy and operate an attack line *for overhaul*
8. Remove flooring, ceiling, and wall components to expose void spaces without compromising structural integrity
9. Apply water for maximum effectiveness
10. Expose and extinguish hidden fires in walls, ceilings, and subfloor spaces
11. Recognize and preserve obvious signs of area of origin and arson
12. Evaluate for complete extinguishment
13. *Separate, remove, and relocate charred material to a safe location while protecting the area of origin for cause determination*

Job Performance Requirements

1. Overhaul a fire scene without compromising structural integrity, discover all hidden fires, preserve fire cause evidence, and extinguish the fire.

3-15: Performing Property Conservation Operations

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.3.14
2. Office of the State Fire Marshal

Given

1. Salvage tools and equipment
2. An assignment
3. *Personal protective equipment*

Requisite Knowledge and Skills

1. *Discuss* the purpose of property conservation and its value to the public
2. *Describe* methods used to protect property
3. *List* types of and uses for salvage covers
4. *Describe* operations at properties protected with automatic sprinklers
5. *Discuss* how to stop the flow of water from an automatic sprinkler head
6. *Identify* the main control valve on an automatic sprinkler system
7. *Describe* procedures for protecting possible areas of origin and potential evidence
8. Cluster furniture
9. Deploy covering materials
10. Roll and fold salvage covers for reuse
11. Construct water chutes and catch-alls
12. Remove water
13. Cover building openings, including doors, windows, floor openings, and roof openings
14. Stop the flow of water from a sprinkler with sprinkler wedges or stoppers
15. Operate a main control valve on an automatic sprinkler system

Job Performance Requirements

1. As a member of a team, conserve property so that the building and its contents are protected from further damage.

3-16: Establishing Water Supply

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.15

Given

1. Supply or intake hose
2. Hose tools
3. A fire hydrant, portable water tank, or static water source
4. *An apparatus*
5. *Personal protective equipment*

Requisite Knowledge and Skills

1. *Describe types and components of municipal and rural water systems*
2. *Discuss loading and off-loading procedures for a mobile water supply apparatus*
3. *Describe fire hydrant operations*
4. *Identify suitable static water supply sources*
5. *Describe procedures and protocol for connecting to various water sources*
6. Hand lay a supply hose
7. Connect and place hard suction hose for drafting operations
8. Deploy portable water tanks as well as the equipment necessary to transfer water between and draft from them
9. Make hydrant-to-engine hose connections for forward and reverse lays
10. Connect a supply hose to a hydrant
11. Fully open and close a hydrant

Job Performance Requirements

1. As a member of a team, connect a fire department *engine* to a water supply, ensuring tight connections and an unobstructed water flow.

A.5.3.15 Static water sources can include portable water tanks, ponds, creeks, and so forth.
--

3-17: Operating Portable Extinguishers

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.16

Given

1. A selection of portable fire extinguishers
2. *Personal protective equipment*

Requisite Knowledge and Skills

1. *Describe* the classifications of fire
2. *Identify* the types of, rating systems for, and risks associated with each class of fire *extinguisher*
3. *Discuss* the operating methods and limitations of portable extinguishers
4. Select an appropriate extinguisher based on the size and type of fire
5. Safely carry portable fire extinguishers
6. Approach fire with portable fire extinguishers
7. Operate portable fire extinguishers

Job Performance Requirements

1. Choose the correct extinguisher and follow the correct extinguisher-handling techniques to completely extinguish incipient Class A, Class B, and Class C fires.

A.5.3.16 The Fire Fighter I should be able to extinguish incipient Class A fires such as wastebaskets, small piles of pallets, wood, or hay; Class B fires of approximately 9 ft² (0.84 m²); and Class C fires where the electrical equipment is energized. If the Fire Department has Class D or K type extinguishers, the fire fighter should be knowledgeable on the devices and their use.

3-18: Operating Portable Electrical Equipment

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.17

Given

1. Fire service electrical equipment
2. An assignment

Requisite Knowledge and Skills

1. *Discuss* safety principles and practices *for portable electrical equipment*
2. *Identify* power supply capacity and limitations
3. *Describe* light deployment methods
4. Operate department power supply and lighting equipment
5. Deploy cords and connectors
6. Reset ground-fault interrupter (GFI) devices
7. Locate lights for best effect

Job Performance Requirements

1. Illuminate designated areas of the emergency scene and operate all illumination equipment within the manufacturers' listed safety precautions.

3-19: Securing Utilities

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.3.18

Given

1. Tools
2. An assignment
3. *Personal protective equipment*

Requisite Knowledge and Skills

1. *Describe* properties, principles, and safety concerns for electricity systems
2. *Describe* properties, principles, and safety concerns for gas systems
3. *Describe* properties, principles, and safety concerns for water systems
4. *Identify* utility disconnect methods
5. *Discuss* dangers associated with utility disconnect methods
6. *Describe* use of required safety equipment
7. Identify utility control devices
8. Operate control valves or switches
9. Assess for related hazards

Job Performance Requirements

1. Turn off building utilities in order to safely complete an assignment.

3-20: Working with Ropes and Knots

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.3.20
2. Office of the State Fire Marshal

Given

1. Personal protective equipment
2. Tools
3. Ropes
4. *Webbing*
5. An assignment

Requisite Knowledge and Skills

1. *Identify the types and uses of ropes*
2. *Identify the types and uses of knots*
3. *Describe the difference between life safety and utility rope*
4. *Identify reasons for placing rope out of service*
5. *List types of knots to use for given tools*
6. *List types of knots to use for given ropes*
7. *Describe types of knots to use for given situations*
8. *Describe hoisting methods for tools and equipment*
9. *Discuss the use of rope(s) to support response activities*
10. *Tie knots*
11. Hoist tools using specific knots based on the type of tool

Job Performance Requirements

1. Tie a knot appropriate for hoisting tools securely and as directed.

Section 4: Preparedness and Maintenance

4-1: Cleaning and Maintaining Tools and Equipment

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 5.5.1

Given

1. Cleaning tools
2. Cleaning supplies
3. An assignment

Requisite Knowledge and Skills

1. *Describe* types of cleaning methods for various tools and equipment
2. *Discuss* the correct use of cleaning solvents
3. *Identify* manufacturers' or departmental guidelines for cleaning equipment and tools *and removal from service*
4. Select correct tools *to maintain* various parts and pieces of equipment
5. Complete recording and reporting procedures

Job Performance Requirements

1. Clean and maintain ladders, ventilation equipment, a self-contained breathing apparatus, ropes, salvage equipment, and hand tools according to manufacturers' or departmental guidelines; record equipment maintenance; and place equipment in a ready state or report otherwise.

4-2: Cleaning and Maintaining Hose

Authority

1. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.5.2
2. Office of the State Fire Marshal

Given

1. Washing equipment
2. Water
3. Detergent
4. Tools
5. Replacement gaskets

Requisite Knowledge and Skills

1. *Describe* departmental procedures for *inspecting a hose according to manufacturer's guidelines*, noting *any defects*, and removing it from service
2. *Discuss* cleaning and maintenance methods
3. *Describe types of* hose rolls and loads
4. Clean different types of hose
5. Operate hose washing and drying equipment
6. Mark defective hose
7. Replace coupling gaskets
8. Roll hose
9. Reload hose

Job Performance Requirements

1. Clean, inspect, and place fire hose in a ready state for service, and note and correct any damage.

Section 5: Wildland Suppression

5-1: Utilizing Wildland Personal Protective Equipment

Authority

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
 - Paragraph 5.1.1
2. Office of the State Fire Marshal

Given

1. Wildland personal protective clothing
2. New generation fire shelter

Requisite Knowledge and Skills

1. *Describe* the use and limitations of *required wildland* personal protective clothing
2. *Describe* the use, limitations, inspection, and care of new generation fire shelter
3. *Discuss* agency policy on fire shelter use
4. *Don* wildland personal protective ensemble
5. *Deploy* new generation fire shelter
6. *Describe* basic verbal communications

Job Performance Requirements

1. Don wildland personal protective ensemble within 60 seconds so that all elements of the ensemble are worn according to the manufacturer's guidelines, and deploy a new generation fire shelter within 30 seconds, while using basic verbal communications.

A.5.1.1 (A) Information related to suppression tactics and safety considerations for wildland fires can be found in the following NWCG publications: NFES 0065, *Fireline Handbook*; NFES 2712, *New Generation Fire Shelter* DVD; and S-110, *Basic Wildland Fire Orientation*. Paragraph A.5.4 of NFPA 1143, *Standard for Wildland Fire Management*, states that all personnel should receive frequent training in first aid. NFPA 1001, *Standard for Fire Fighter Professional Qualifications*, Section 3.3, defines the requirements for structural fire fighters. This section requires CPR certification, the demonstration of several basic first aid skills, and a knowledge of infection-control methods. The AHJ responsible for individuals performing wildland fire suppression operations should set minimum requirements for first aid training and certification based on local needs and the requirements of the jurisdiction.

A.5.1.1. (B) The requirements for protective clothing and equipment are found in NFPA 1977, *Standard on Protective Clothing and Equipment for Wildland Fire Fighting*.

5-2: Cleaning and Maintaining Wildland Personal Protective Clothing

Authority

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
 - Paragraph 5.3.2
2. Office of the State Fire Marshal

Given

1. *Wildland personal protective clothing*

Requisite Knowledge and Skills

1. *Describe* maintenance of *wildland* personal protective *clothing*
2. *Describe* the inspection of *wildland* personal protective *clothing*
3. Recognize unserviceable items among *wildland* personal protective *clothing*
4. Demonstrate the proper cleaning procedures for *wildland* personal protective *clothing*

Job Performance Requirements

1. Maintain wildland personal protective clothing so that it is serviceable and available for use on the fireline; recognize defects and report them to a supervisor.

5-3: Maintaining Wildland Hand Tools and Equipment

Authority

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
 - Paragraph 5.3.3
2. Office of the State Fire Marshal

Given

1. Tools
2. Equipment
3. Agency maintenance specifications

Requisite Knowledge and Skills

1. *Describe* the inspection of tools
2. *Describe* the inspection of assigned suppression equipment
3. Recognize unserviceable items
4. *Perform* required maintenance techniques
5. *Sharpen* assigned suppression equipment
6. *Perform* other maintenance techniques for assigned suppression equipment
7. Use required maintenance equipment

Job Performance Requirements

1. Maintain assigned suppression hand tools and equipment so that assigned equipment is serviceable; recognize defects and report them to a supervisor.

A.5.3.3 The tools and equipment provided to the wildland fire fighter vary from jurisdiction to jurisdiction and can include such items as fireline hand tools (shovel, ax, fire rake, Pulaski, flapper, etc.) and basic water application equipment (backpack pumps, hose, nozzles, hose clamps and fittings, etc.).

A.5.3.3 (B) Maintenance equipment would include those items, such as files, sandpaper, wedges, and so forth, used to maintain fire suppression hand tools.

5-4: Responding to an Incident

Authority

NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012

- Paragraph 5.5.2

Given

1. An assembly location
2. An assignment
3. Incident location
4. Mode of transportation
5. Time requirements

Requisite Knowledge and Skills

1. *Identify* equipment requirements
2. *Discuss* agency time standards
3. *Identify* special transportation considerations (weight limitations)
4. *Discuss* agency safety response guidelines
5. *Describe* operational procedures for various transportation modes

Job Performance Requirements

1. Assemble and prepare for response so that arrival at the incident with the required personnel and equipment meets agency guidelines.

A.5.5.2 (A) Personal equipment standards, response and travel time standards, personal equipment weight limitations, and preferred methods of transportation all can vary by the AHJ.

5-5: Recognizing Hazards and Unsafe Situations during Wildland Suppression

Authority

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
 - Paragraph 5.5.3
2. Office of the State Fire Marshal

Given

1. A wildland or wildland urban interface fire
2. Standard safety policies and procedures of the AHJ

Requisite Knowledge and Skills

3. *Describe* basic wildland fire safety
4. *Describe* basic wildland fire behavior
5. *Describe* basic wildland suppression methods

Job Performance Requirements

1. Recognize hazards and unsafe situations, promptly communicate hazard(s) and unsafe condition(s) to a supervisor, and take appropriate action.

A.5.5.3 (A) The safety and welfare of personnel is the first and foremost consideration in all incident operations and decisions. A wildland fire fighter must have a working knowledge of the following fire suppression safety standard and procedures:

1. Fire behavior (see S-190, *Introduction to Wildland Fire Behavior*)
2. Ten standard fire orders (see NFES 0065, *Fireline Handbook*)
3. Eighteen “watch out” situations (see NFES 0065, *Fireline Handbook*)
4. Downhill indirect line construction guidelines (see NFES 1077, *Incident Response Pocket Guide [IRPG]*)
5. LCES (lookouts, communications, escape routes, and safety zones), which include the following procedures:
 1. Adequate lookouts should be posted to observe potential changes in fuel, weather, topography, and fire behavior.
 2. Communication should be provided for and maintained with the supervisor at all times.
 3. Escape routes for emergency evacuation will be identified and clearly understood by all fire fighters.
 4. Safety zones in cleared or natural areas devoid of flammable material should be reconnoitered and/or provided for and known to all crew members.
6. NFES 2712, *New Generation Fire Shelter DVD*

Draft

5-6: Constructing a Fireline

Authority

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
 - Paragraph 5.5.4
2. NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013
 - Paragraph 5.3.19
3. Office of the State Fire Marshal

Given

1. A wildland fire
2. Agency line construction standards
3. Suppression tools
4. Water or other suppression agents
5. Equipment

Requisite Knowledge and Skills

1. *Describe* the principles, techniques, and standards of fireline construction
2. Use hand tools correctly
3. Apply fire streams
4. *Apply* fire fighting agents

Job Performance Requirements

1. Construct a fireline that conforms to the construction standard.

A.5.5.4 (B) The term “agent” in this requirement refers to any suppressant or retardant that would be applied with a hose stream, including water, foam, wet water, and other retardants.

5-7: Reinforcing a Fireline

Authority

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
 - Paragraph 5.5.5
2. Office of the State Fire Marshal

Given

1. A wildland fire
2. Suppression tools, water, or other suppression agents
3. Equipment

Requisite Knowledge and Skills

1. *Describe* line improvement techniques
2. *Identify* safety considerations when burning out
3. *Describe the types of basic ignition devices*
4. Use basic ignition devices

Job Performance Requirements

1. Locate and abate burning materials and unburned fuels that threaten the fireline's integrity.

A.5.5.5 (B) See NWCG S-130, Fire fighter Training, for additional information on burning out and basic ignition devices.
--

5-8: Operating in the Wildland Urban Interface

Authority

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
 - Paragraph 5.5.6
2. Office of the State Fire Marshal

Given

1. A wildland or wildland urban interface fire
2. Suppression tools
3. Equipment

Requisite Knowledge and Skills

1. *Describe wildland fire behavior within the wildland urban interface*
2. *Describe wildland fuel removal for structure preparation*
3. *Identify structure defense methods*
4. *Identify equipment and personnel capabilities within the wildland urban interface*
5. *Conduct structure defense within the wildland urban interface*

Job Performance Requirements

1. Describe methods of reducing the threat of fire exposure to improved properties in order to protect them.

5-9: Conducting Mop-up Operations

Authority

NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012

- Paragraph 5.5.7

Given

1. A wildland fire
2. Suppression tools
3. Water or other suppression agents
4. Equipment

Requisite Knowledge and Skills

1. *Describe principles, techniques, and standards for mop-up*
2. Use basic tools to perform mop-up operations
3. Use basic techniques to perform mop-up operations

Job Performance Requirements

1. Mop up a fire area, locating and extinguishing burning fuels that threaten escape.

5-10: Conducting Patrols

Authority

1. NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012
 - Paragraph 5.5.8
2. Office of the State Fire Marshal

Given

1. A wildland fire
2. Suppression tools
3. Equipment

Requisite Knowledge and Skills

1. *Describe the principles, techniques, and standards of patrol*

Job Performance Requirements

1. Patrol and maintain control of the fire area.

. Section 6: Hazardous Materials for Fire Fighters

6-1: Recognizing Hazardous Materials/WMDs

Authority

1. NFPA 472 Standards for Competence of Responders to Hazardous Materials/WMD Incidents 2008
 - Chapter 4
 - Chapter 5
2. Office of the State Fire Marshal

Given

1. *A hazardous materials/WMD incident*
2. *The DOT Emergency Response Guidebook or equivalent guide*
3. *Shipper/manufacturer papers and contacts*
4. *Material safety data sheets*
5. *An assignment*

Requisite Knowledge and Skills

1. *Define hazardous materials (4.2.1-1)*
2. *Describe the risks associated with hazardous materials (4.2.1-3)*
3. *Recognize the presence of hazardous materials in an emergency (4.2.1; 4.2.2; 4.1.1.1)*
4. *Identify the hazardous materials involved (4.2.3; 4.2.2)*
5. *Recognize the presence of WMDs (4.2.1)*
6. *Identify procedures in the event of a WMD incident (4.4.1)*
7. *Identify the potential outcomes associated with an emergency when hazardous materials are present (5.1.2.2)*
8. *Identify the types of additional resources for a hazardous materials response (4.4.1-5)*
9. *Identify mandatory notifications in accordance with AHJ (4.4.2)*
10. *Describe the role of the fire fighter in the AHJ's emergency response plan, including site security and control zones (4.4.1)*
11. *Describe the components of the DOT Emergency Response Guidebook or equivalent guide (4.2.1-3)*
12. *Identify shipper/manufacturer papers and contacts (4.2.1-10)*
13. *Identify hazardous materials, their potential hazards, and appropriate personal protective actions using material safety data sheets (4.2.1-10; 5.2.2)*
14. *Describe the process to preserve evidence (5.4.2)*
15. *Initiate protective actions to secure the area (4.4.1)*
16. *Make appropriate notifications as directed by the AHJ (4.1.2.2; 4.2.3)*
17. *Use the DOT Emergency Response Guidebook or equivalent guide (4.2.1-10)*

18. *Use material safety data sheets to identify hazardous materials, their potential hazards, and appropriate personal protective actions (5.4.2)*

Job Performance Requirements

1. *Recognize the presence of hazardous materials and the indicators of a hazardous materials incident, correctly identify the materials involved, take personal protective actions, initiate the appropriate notification process, and secure the area.*

Draft

6-2: Identifying and Analyzing a Hazardous Materials/WMD Incident

Authority

1. NFPA 472 Standards for Competence of Responders to Hazardous Materials/WMD Incidents 2008
 - Chapter 3
 - Chapter 5
2. Office of the State Fire Marshal

Given

1. *A hazardous materials incident*
2. *Recognized hazardous materials*
3. *Fire department standard operating procedures*
4. *Equipment readily available to personnel*
5. *An assignment*

Requisite Knowledge and Skills

1. *Define basic hazardous materials terms (3.3; 3.4)*
2. *Define health hazards and physical and chemical properties of hazardous materials (5.2.3)*
3. *Describe basic hazard and risk assessment techniques (5.2.1; 5.2.3; 5.2.4)*
4. *Describe procedures for initial hazardous materials/WMD response (5.3.1; 5.3.2)*
5. *Describe the incident command system used in hazardous materials incidents (5.4.3)*
6. *Discuss standard operating procedures according to AHJ (5.1.2.2)*
7. *Identify the containers and materials involved using the DOT Emergency Response Guidebook or equivalent guide (5.2.1.1)*
8. *Identify damaged containers and the effects of release (5.2.3)*
9. *Describe the process of evacuation and/or shelter in place (5.4.1)*
10. *Determine if these materials have been released (5.2.1)*
11. *Evaluate the status of each incident response objective at a hazardous materials/WMD incident (5.5.1)*
12. *Communicate the status of a hazardous materials/WMD incident (5.5.2)*
13. *Limit access to the area (5.4.1)*

Job Performance Requirements

1. *Protect persons, property, and the environment from further harm, initiate the appropriate communications process, and secure the area.*

6-3: Performing Emergency Decontamination

Authority

1. NFPA 472 Standards for Competence of Responders to Hazardous Materials/WMD Incidents 2008
 - Chapter 5
2. Office of the State Fire Marshal

Given

1. *A hazardous material incident*
2. *An individual contaminated by a hazardous material that can be decontaminated by fire fighters in personal protective equipment*
3. *Equipment readily available to fire fighters*
4. *Standard operating procedures*
5. *An assignment*

Requisite Knowledge and Skills

1. *Identify capabilities and limitations of the personal protective equipment provided by the AHJ (5.3.3; 5.4.4)*
2. *Identify ways that people, personal protective equipment, apparatus, tools, and equipment become contaminated (5.3.4)*
3. *Explain the importance and limitations of emergency decontamination procedures (5.3.4)*
4. *Describe standard operating procedures for emergency decontamination (5.3.4)*
5. *Prepare an emergency decontamination area (5.3.4)*
6. *Perform emergency decontamination (5.3.4; 5.4.1)*

Job Performance Requirements

1. *Perform emergency decontamination procedures, use appropriate personal protective equipment based on the hazard, protect exposures, avoid hazards, decontaminate victims and responders, and identify contaminated items and products of contamination for subsequent control.*

6-4: Mitigating a Hazardous Materials/WMD Incident

Authority

1. NFPA 472 Standards for Competence of Responders to Hazardous Materials/WMD Incidents 2008
 - Chapter 6
2. Office of the State Fire Marshal

Given

1. *A hazardous materials incident*
2. *Recognized hazardous materials*
3. *Department standard operating procedures*
4. *Equipment readily available to personnel*
5. *An assignment*
6. *Personal protective equipment*

Requisite Knowledge and Skills

1. *Describe product control operations including absorption, adsorption, damming, diking, dilution, retention, remote valve shutoff, and vapor dispersion (6.6.3.1)*
2. *Identify tools and equipment for product control (6.6.4.1)*
3. *Explain the technical decontamination process, according to AHJ (6.4.2.2)*
4. *Perform basic control, containment, and confinement operations within the capabilities of the AHJ's resources and personal protective equipment (6.6.4.1)*

Job Performance Requirements

1. *Perform basic control, containment, and confinement techniques to control hazardous materials release, and protect fire fighters from contamination.*

State Fire Training Content

Code Key

Blocks

- G = Given
- RKS = Requisite Knowledge and Skills
- JPR = Job Performance Requirements
- NCTS = New certification training standard

Sources

- [ACRONYM = Title]
- [ACRONYM = Title]
- [ACRONYM = Title]

Certification: Fire Fighter I

CTS	Block	Addition	Justification	Source/Reference
[#-#]	[Code]	[Text]	[Text]	[Text]